

EMERALD ASH BORER MANAGEMENT PLAN

FOR THE

VILLAGE OF SLINGER



PREPARED SEPTEMBER, 2012
BY:
SLINGER PARKS, RECREATION & FORESTRY DEPARTMENT

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EXECUTIVE SUMMARY

This management plan has been written due to the pending infestation of the Emerald Ash Borer, an insect that has killed over 20 million trees in neighboring states and this has now been discovered in numerous counties in Wisconsin.

This plan will serve as a recommendation guide for dealing with this insect and dying Ash trees on public Village property in future years.

Trees, parks and other green space areas contribute greatly to the quality of life in the Village of Slinger. Residents view trees and their value as an important part of the community. They give character to the neighborhoods and yards, help cool our homes and provide for residents interaction with nature, relaxation, and recreation in ways that enhance a sense of community. According to our current tree inventory:

- A total of 1,250 trees are currently identified within the Village's street trees, right of ways, and parks.
- Approximately 960 trees are street trees or in the right of way
- Approximately 290 trees are park or village hall trees
- A total of 227 publically owned are Ash Trees
 - Approximately 18% of the Village of Slinger public trees are Ash
 - 194 of those Ashes are on public streets and right of ways
 - 21% of street trees & right of ways are Ash
 - Approximately 33 Ash trees are in the parks.
 - The estimated value of publically owned Ash trees is \$101,428 or an average of \$446.82 for each tree.
- In the event that all of the above ash trees would have to be removed due to extensive invasion of the EAB, the cost associated with this major event would be approximately as follows:
 - ALL ASH TREES (Parks, Streets, Right of Ways, and Village Hall)
 - Removal & Restoration \$ 30,885
 - Replanting \$45,400
 - Total cost for removal and replanting \$ 76,285
 - STREET TREES
 - Removal & Restoration \$ 25,080
 - Replanting \$ 38,800
 - Total cost for removal & replanting for street trees \$ 63,880
 - PARK TREES
 - Removal & Restoration \$ 5,805
 - Replanting \$ 6,600
 - Total Cost for removal and replanting \$ 12,405

PLAN ADMINISTRATION

The implementation of the Management Plan for the Village of Slinger will be under the supervision of the Parks & Forestry Supervisor and the Parks, Recreation & Forestry Director:

Josh Trame
Parks & Forestry Supervisor
Village of Slinger
300 Slinger Road
Slinger, WI 53086
(262 -644-5265)
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Tony Dobson
Parks, Recreation & Forestry Director
Village of Slinger
300 Slinger Road
Slinger, WI 53086
(262-644-5265)
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The prime Village Contact (in the event EAB is found with in the Village) should be:

Josh Trame and Tony Dobson (information listed above)

PURPOSE

By implementing the provisions of this management plan, the Village of Slinger is attempting to mitigate the disruption of its local urban forest caused by the pending infestation of the Emerald Ash Borer (EAB). Taking a moderate approach to this pending infestation will enable the Village to address the needs in an efficient and effective manner.

The Village of Slinger must prepare to manage this pest on three fronts: street & right of way trees, park trees and trees on private property. Therefore, this plan will apply throughout the Village on all public properties where ash trees are currently growing as well as on private property where ash trees may create a hazardous condition for public rights-of-way or other public properties (parks).

As per the master tree inventory contained in the Tree Inventory Management Plan conducted in 2012, our public parks and streets ash tree inventory represents about 18 % or 227 of Slinger's urban forest of 1,250 (+/-). Most of the ash tree population is considered small to medium in size, or under 10" DBH. There are very few mature size trees within the parks or streets right of ways.

With the discovery of the EAB in Wisconsin and Washington County, there is an increased need to adequately prepare the Village of Slinger for possible infestation. A moderate approach to the Emerald Ash Borer Local Management Plan will enable the Village to:

- Continue to keep the master tree inventory current.
- Develop an ash tree reduction program.
- Develop tree replanting recommendations.
- Remove ash trees as deemed appropriate and replant trees that are removed.
- Work within the adopted yearly budget relating to forestry initiatives.
- Train personnel and conduct surveys to look for EAB.
- Notify Village residents whom may have an Ash tree which may cause a hazardous condition.
- Develop and strengthen community education and outreach.
- Keep local authorities updated about the EAB as it is discovered more within Wisconsin.

WHAT IS THE EMERALD ASH BORER?

The EAB is an exotic beetle that is tiny, metallic green and bullet shaped. In the 1990's, this invasive insect traveled from east Asia to southeastern Michigan unintentionally concealed within solid wood packing materials routinely used for international cargo shipments. Since its discovery in Detroit, Michigan in 2002 the EAB has been responsible for killing all ash trees within its path. Movements of nursery stock and firewood have been inadvertently responsible for the majority of new EAB introductions in the other states.

In the summer months, adult EAB beetles nibble the leaves of the ash trees, but do little damage. It is the larvae that are responsible for trees' decline and eventual death. Within one to three years, a tree can no longer circulate the nutrients it needs. It appears EAB infestation is always fatal. EAB infestation kills all varieties of North American ash trees. Mountain ash is not a "true" ash and is not susceptible to infestation.

They have and are currently killing millions of ash trees in Michigan, Ohio, Indiana, Illinois, Minnesota, several other states, Ontario, Canada and now in Wisconsin. Through 2007, more than 20 million ash trees were killed in Michigan, Ohio and Indiana alone.

The costs to communities impacted by the EAB have been considerable. In residential areas, tree removal and replacement is often necessary. The Wisconsin DNR and DATCP estimate that it costs approximately \$340 to remove an average sized (12" DBH) street ash tree while the cost of replacing a removed tree averages around \$375. Since almost all of the ash trees potentially at risk within the Village are classified as small or medium diameter trees less than 10" DBH, the costs of removal and replanting are projected to be substantially under the above listed amounts.

The Village of Slinger should plan to distribute the costs associated with certain and massive tree death over a manageable time period, as well as lesson the social and economic impact that such an extensive loss will have on the quality of life in our community.

SYMPTOMS OF EAB INFESTATION

Be on the lookout for any ash tree showing general signs of decline. Look for:

- Epicormic sprouting (unusual branches produced from the tree's base).
- Dead or dying branches in the upper crown.
- Yellow or off-color foliage during the growing season.

Some more specific symptoms of EAB infestation include:

- D-shaped Exit Holes: When EAB adults emerge from beneath the bark, they create distinctive D-shaped exit holes.
- Vertical Bark-splits: The feeding of EAB larvae often causes a 2 to 5 inch split in a tree's bark. In some cases, larval galleries can be seen beneath these splits.

- **Increased Woodpecker Activity:** Woodpeckers feed on EAB larvae. Woodpecker activity that remove patches of bark may be a sign of EAB infestation.
- **Presence of Metallic Green Beetles:** Adult EAB beetles are metallic green in color and are 3/8 - 1/2 inch in length and 1/16 inch in width—small enough to fit on a penny. If a beetle is found that fits this description, collect and preserve it in alcohol for identification. Contact Wisconsin's EAB hotline at 1-800-462-2803.

EAB LOCAL PLAN DEFINITIONS

The following definitions are presented to explain certain terminology within the Village of Slinger's local management plan:

dbh-diameter at breast height; represents the diameter in inches of a trunk cross-section measured at 4 1/2' above ground level; a basis for estimating or identifying tree volume, value, management needs and costs, utilization options, etc.

EAB-the emerald ash borer insect; as an adult it measures approximately 1/2" in length by 1/8" wide, is metallic green in color, and somewhat bullet shaped. The larvae can reach a length of a pair of brown, pincer-like appendages on the last segment.

EAB readiness plan-a document delineating local EAB readiness activities and processes; includes scope and purpose, authority, responsibility, policies and procedures, actions/tasks, available resources, forms and contracts, technical references and support information (such as surveying and reporting protocols) and similar content.

Eradication-total elimination; involves removing all ash trees with the EAB infested area as well as all ash trees with 1/2 mile of the outer edge of the known infested area.

Infestation-refers to an area where the ash trees have been positively identified as having a sustained population of EAB.

Preemptive removal-in the case of EAB, it refers to removing trees prior to them becoming infested with EAB. It does seem reasonable that if a community has ash trees that are declining or are in conflict with buildings or utilities, that instead of performing a remedial pruning, removal may be a strong option.

Quarantine area-a defined geographic area from which goods may not be transported;

WHAT IS THE VILLAGE OF SLINGER DOING?

The Village of Slinger has been monitoring the status of the EAB and has taken the following steps:

- Obtained the EAB Toolkit for Wisconsin Communities from the DNR.
- Attended DNR and Oak Creek Workshop.
- Attended DNR Ash Borer Hands On Workshop in Newburg.
- Collected several pieces of useful educational material on EAB from various sources.
- Currently assessing staff, training and equipment needs.
- Inspection on our ash tree inventory.
- Added educational material on EAB for residents on the Parks, Recreation & Forestry Department forestry web page.

EAB HOTLINE 1-800-462-2803

VILLAGE OF SLINGER ACTION PLAN

8 year plan

Street Tree Pre-Emptive Removal with Treatment

13% (Approx. 25) ash street trees will be removed each year to reduce the number of ash trees within the village and will be replanted with a different species of tree. Soil injection would be done on the best mature Ash trees to prolong the removal process.

Estimated Cost Per Year over 8 years

- Removal and Restoration of Ash Trees \$3,460
- Replanting of Trees \$5,291
- Chemical Treatment of Ash Trees \$1,203
- Total Cost of Year 1 - \$ 9,954

As funding and time permit, ash trees in very poor, poor or diseased condition will be removed first, followed by Ash trees in fair condition. These trees will be replanted with another species of tree. Average cost for removal of an ash tree is approximately \$160. Cost of replanting a tree is approximately \$200 including the tree and planting costs. This replanting will be done in the fall of the year. It is the intent of the Management Plan to replace each ash tree in priority areas as one is removed.

Chemical Treatments

Use of chemicals does not guarantee the protection of a tree; however research has shown a 99% success rate with regular treatment. Average chemical treatment costs in 2012 average around \$3.25/inch for the diameter per tree. For example, an ash tree that is 10" DBH would cost at least

\$32.50 to treat. This is based on one fall treatment annually. If all ash trees on street right of ways and parks were to be treated on an annual basis, the amount needed would be approximately \$7,500. Chemical treatment applications would be done by Wachtels Tree Service.

Removal of Wood Chips

Establishing a marshalling yard for wood and wood chips: All trees 12" or smaller would be chipped with the appropriate chipper which would make chips 1" or smaller. This meets the qualifications to destroy any EAB that may be in the wood.

Monitoring the EAB:

The Village does not have enough personnel available to have a formal inspection program that would look at every ash tree on a regular basis. However, during the year, available personnel will monitor conditions of ash trees and randomly inspect trees for signs of EAB. Priority will be given to any tree to be in decline. If conditions warrant, a declining ash tree will be removed.

If a Village resident suspects EAB has infected a tree on either public property (parks/medians) or on private property (residences), they should call the 1-800-462-2803 DNR EAB Hotline number **and** also call the Village at 262-644-5265.

Once the Village has been contacted, we can make the proper contacts within the Department of Natural Resources to have the tree in question evaluated and appropriate action taken.

WHAT CAN RESIDENTS DO?

There are several things that residents can do to assist in the effort to control the EAB:

Know the signs and symptoms of EAB! Be on the lookout where you live, work and play.

Know your trees! Have a certified arborist assess your trees' health. If you have ash trees, now is the time to start thinking about whether or not you will use insecticide treatments to try to save them. Although this is a long-term investment and the cost of treatment can add up over the years, insecticides may be a good option for highly valued trees.

Chemical treatment options information! Residents may choose the option of using chemical applications to potentially save a valuable ash tree on their property. An excellent resource outlining these options is entitled *Insecticide Options for Protecting Ash Trees from Emerald Ash Borer* and is a cooperative university effort from several of the universities of Illinois, Michigan State, Purdue, Illinois and UW-Extension. It may be obtained online at www.emeraldashborer.info.

Plant trees (but not ash)! Most tree nurseries in our area have stopped stocking ash, since this is no longer a smart planting choice. For a list of ash alternatives, see [http://www.entomology.wisc.edu/emeraldashborer/Alternatives to Ash for Homeowners.pdf](http://www.entomology.wisc.edu/emeraldashborer/Alternatives%20to%20Ash%20for%20Homeowners.pdf)

Don't move firewood! EAB has spread quickly throughout north central US and into Canada not because it is highly mobile on its own, but because people have helped it. If you use firewood at home or when you travel, purchase it on site.

Learn more! Go to www.emeraldashborer.info or www.emeraldashborer.wi.gov. If you suspect your ash tree has EAB symptoms:

CALL THE EAB HOTLINE AT 1-800-462-2803.

PUBLIC EDUCATION AND COMMUNICATION

In order to assist the residential homeowners of the Village, a link to a copy of this Local Management Plan will be available on the Parks, Recreation & Forestry Department forestry web page and will include:

- Numbers of actual ash trees found in Slinger
- Emerald Ash Borer identification tips
- Removals of unhealthy and other ash trees
- Chemical treatment options and the Village's treatment
- The Village's focus of street and park trees
- Replanting efforts
- Reporting to the EAB hotline number at 1-800-462-2803

EAB UPDATES AND ADDITIONAL INFORMATION

Listed below are some excellent sites to obtain additional information regarding the EAB:

www.emeraldashborer.wi.gov/ -EAB portal for the State of Wisconsin

www.emeraldashborer.info/ -EAB web page administered by Michigan State University

www.dnr.state.wi.us/org/land/Forestry/Ash/index.htm -WI DNR EAB web site

www.entomology.wisc.edu/emeraldashborer/ - UW Extension, Dept. of Entomology website

www.datcp.state.wi.us/arm/environment/insects/emerald-ash-borer/index.isp WI DATCP EAB

<http://dnr.wi.gov/forestry/uf/eab/> - EAB toolkit developed by the WI DNR

<http://dnr.wi.gov/forestry/fh/pdf/WIEABResponsePlan.pdf> - State of Wisconsin EAB response plan

www.entomology.wisc.edu/emeraldashborer/ - University of Wisconsin Cooperative Extension Entomology website describing pesticide treatments for EAB